

ABSTRACT

A preamplifier device (26) for a thin film transducer disk drive system having operation speeds up to and greater than 2 Gb/s. The device (26) includes a low power/high speed driver (203) having a cascaded Class AB buffer. In at least one embodiment the device (26) includes separated drive devices in the driver (203) and H-bridge circuit (205) realized in multiple smaller devices biased separately to reduce transistor self-heating effects and a further embodiment includes a reference (201) having a base cancellation scheme and a Class AB current source for improving accuracy and stability in such high speed devices.